

XIX. Hymenoptera Aculeata collected in Algeria by the
 Rev. ALFRED EDWIN EATON, M.A., F.E.S., and
 the Rev. FRANCIS DAVID MORICE, M.A., F.E.S.
 Part IV. *Descriptions of new Sphegidae*. By the
 late EDWARD SAUNDERS, F.R.S.

[Read March 2nd, 1910.]

[THE following descriptions were intended for incorporation in what would have been the concluding part (dealing with the *Sphegidae*) of a Paper commenced under the above title in these Transactions in 1901 and continued in 1905 and 1908.

The author had before and during his last illness made some progress with other portions of the intended work; but these are in too incomplete and fragmentary a state to be published as they were left. The descriptions, however, though evidently a mere rough draft which the author would have revised and copied afresh before sending it to press, do not seem to require any substantial alteration in order to make them useful to Hymenopterists. They are accordingly reproduced practically as written, only a few clerical and grammatical slips (due to haste) have been silently emended, and here and there a blank space left by the writer for localities, dates, measurements, etc., to be added later, has been filled by an insertion for which the author is not to be considered responsible, such insertions being always indicated by the employment of square brackets [].

Mr. Eaton presented all his captures to Mr. Saunders, and they are now—except a few given or exchanged away by the latter in his lifetime as duplicates—in the Natural History Museum at South Kensington.

The other materials gathered by Mr. Saunders for his paper have been handed over to a colleague whom he had invited to co-operate in preparing it, and it is hoped that in some form or other at least their main substance may be made available to Hymenopterists by communication to the Society before the end of the present year.]

1. SPHEX [HARPACTOPUS] EATONI, n. sp.

Niger, capite pro- et mesonoto (scutello excepto) pilis adpressis argenteis dense vestitis. Ad *S. lugentem* Kohl proxime accedit, is tamen rugis validis mesonoti facile distinguitur. Etiam *S. tyranno* Smith colore similis, is autem differt pedibus setis rigidis instructis. Ab *S. stschurowskii* Rad. propter scutellum rugosum etc. mox distinguendus.

Black clothed with black hairs. ♀ with the face (except a bright glabrous spot at the apex of the clypeus), the vertex, the pro- and mesonotum (excluding the scutellum), and the base of the tegulae covered with a dense silvery pubescence which entirely hides the sculpture beneath. ♂ resembling the ♀ but with only the face and mesonotum silvery. Clypeus covered with somewhat remote black bristles which project beyond the silvery surface, its apical margin rounded, raised and slightly sinuate in the centre, more truncate in the ♂ than in the ♀—just above the apex is a shining shallow impression. Mandibles in the ♀ large, the apical tooth very elongate, more so than in *stschurowskii* var. *hyalipennis*, Kohl. Head with black hairs in the ♂, the cheeks behind the eyes with a long beard. (In the ♀ the only long black hairs are on the cheeks beneath, the mandibles, clypeus, and labrum; a few very short ones show through the silvery hairs of the vertex and back of the head.) The pronotum propleurae and prosternum are obliquely striate where the surface is not hidden by the silvery pubescence (as it is, partly, in the ♀). Mesopleurae and sternum rugose above, the rugosities [? of the former] taking the form of striae as they approach the sternum in the ♀; entirely rugose (as well as the sternum) in the ♂. Tegulae clothed at the base with silvery hairs in the ♀, with greyish-black ones in the ♂.

Wings nearly black, with violet reflections: the hind-wings in the ♀ clear only beyond the cells; the 2nd submarginal cell narrowed to its apex where it is scarcely more than half as wide as its base; the 3rd a little less narrowed towards its apex than is the 2nd in the ♀, narrowed in about the same proportion as the 2nd in the ♂; (the bases of the two cells are of about equal length).

Scutellum moderately convex, rugose with signs of longitudinal striae; postscutellum transversely strigose. Propodeum with a pentagonal area which is clothed with rather short semi-decumbent hairs and rugose in both sexes—its sides are rugosely diagonally strigose, and in the ♂ the rugosities towards the base of the abdomen are larger, and tend to become clathrate. In one of my ♀♀ the area tends to be rufescent in certain lights. Legs entirely black,

♀ with the intermediate coxae trochanters and femora in front, and the hind coxae, clothed with silvery pubescence: the front metatarsi externally bear a comb of eight fine long curved bristly spines with some shorter ones between them, on the side towards the body are three rather thicker spines and a dense brush of very short dark hairs. Front coxae (♀) transversely strigose with their central portion polished and punctured, femora shining and punctured. In the ♂ there is no sign of silvery pubescence, and the anterior coxae are rugose and dull. The tibiae in both sexes are simply spinose, not densely bristly as in *tyrannus*, etc. Posterior metatarsi slightly curved at the extreme base in both sexes. Abdomen polished, its petiole slightly curved (its ventral length subequal to that of the hind coxae in the ♀, longer in the ♂). The rest of the body short and oval in the ♀, longer proportionally in the ♂. Long. 28-32 mm.

This fine species is allied to *lugens*, Kohl. But of his species Kohl observes that the mesonotum is so rugose that the rugosities show through the silvery hairs. In this species the silvery pubescence lies so flat on the surface, that its rugosities, if any, must quite clearly be very slight.

Biskra, v, 97. (Coll. Saunders.)

2. ASTATUS FUMIPENNIS [n. sp.].

Caput nigrum, nitidum, facie et genis postice albo-hirsutis. Thorax niger nitidissimus, remotissime punctatus, pleuris albo-hirsutis; alae anticae fuscae, posticae dilutiores. Abdomen rufo-testaceum, valvulae dorsalis lateribus valde reflexis. [♀]

Head and thorax shining black, mandibles red towards the base; face and head posteriorly and thorax beneath clothed with white hairs. Antennae with the 2nd joint of the flagellum 3 times at least as long as the 1st and distinctly longer than the 3rd: the scape clothed outwardly with white hairs, inwardly with thick black bristles, 1st and 2nd joints of the flagellum clothed with stiff black hairs. Vertex and region above the ocelli shining, largely and remotely punctured, that between the ocelli and below them closely punctured. Mesonotum (including the scutellum) very shiny and very remotely punctured; mesopleurae punctured. Anterior wings dark smoky brown: radial cell rather more than twice as long as wide, its apex truncate; posterior wings clearer; both pairs darkened towards the apex. Legs black, clothed with black bristly hairs; the anterior tarsi pitchy-testaceous, the others more or less

piceous. Propodeum finely reticulate above, its sides clothed with white hairs and diagonally strigose. Abdomen entirely red; apical dorsal valve with the sides strongly reflexed, and with black decumbent spine-like hairs as in *boops*, etc.

Long. 12 mm.

A very distinct-looking species, but unfortunately only a single ♀ was captured.

[Biskra, 25. v, 97. A. E. E. Type in Coll. Saunders.]

3. *ASTATUS LAETUS*, n. sp.

♀. Nitidus, niger; palpis, mandibularum basibus, tegulis, abdomine toto pedibus que (coxis trochanteribus que exceptis), ferrugineo-rufis; alis plus minus infuscatis, cellula radiali brevi, latitudine sua vix duplo longiore. Capitis vertex remote, facies dense punctata. Thorax nitidissimus, mesopleuris crebre punctatis et strigosis, propodei lateribus clathrato-rugosis.

♀. Head and thorax black and very shining. Palpi and base of the mandibles red. Antennae with the second joint of the flagellum about three times as long as the first. Vertex and region above the ocelli very remotely punctured; face below them dull and closely punctured, clothed sparingly at the sides with whitish hairs. Cheeks behind the eyes also thinly clothed with white hairs. Mesonotum including the scutellum very shining, and exceedingly remotely punctured. Mesopleurae closely punctured and diagonally strigose. Wings slightly smoky, darker towards the apex; radial cell very short, scarcely twice as long as wide, its apex truncate. Tegulae red. Legs with the exception of the coxae and trochanters entirely clear red; the anterior femora clothed with long whitish hairs, intermediate and hind femora with brownish-black, tibiae and tarsi with black spines. Propodeum finely reticulate above, its sides coarsely clathrate posteriorly, with a rather narrow almost smooth (but very finely punctured) region anteriorly. Abdomen entirely red, its apical valve with a very slightly raised margin, and with adpressed pale spine-like hairs.

Long. 10 mm.

A very distinct species, its bright red legs and very bright thorax and head giving it a very peculiar appearance. From *rufipes* it differs in the absence of black hairs on the frons, the closely-punctured face, and the sculpture of the sides of the propodeum.

[Biskra, 19. v, 97. A. E. E. Type in Coll. Saunders.]

4. *ASTATUS RADIALIS*, n. sp.

♀. Niger; mandibularum basibus, abdomine toto, parte femorum, tibiis tarsis que rufis; antennarum articulo tertio secundo plus quam duplo longiore; capite et thorace griseo hirtulis, crebre punctatis; alis subfumatis, apicibus harum valde infuscatis, cellula radiali brevissima, latitudine sua vix duplo longiore, apice abrupte truncato, cellulâ tertiâ submarginali angustissima; ceteris ut in *boops*.

♀. Easily distinguished from *boops* or *minor* by the red legs, and from *rufipes* by the short radial cell, as well as by the rather unusually dense grey pubescence of the head and thorax. The dark band of the wings also gives it an unusual appearance, this being more pronounced than in the other species and not quite reaching to the apex of the wing. The very narrow third submarginal cell is another characteristic, but this varies slightly in my examples. In the short radial cell the species approaches *costae*, but of that species (which I do not know) Kohl says that the wings are "wasserhell," and my specimens seem [too (?)] large for that species, being $7\frac{1}{2}$ mm. in length. The sculpture of the propodeum is rather finer than in *boops* and *minor*.

Long. 8 mm.

♂ (?). I have a single male, caught at Le Tarf, on the same day and on the same flower (*Foeniculum vulgare*) as the female, which probably belongs to the same species. It has the radial cell shorter and more truncate than in *boops*, and the third submarginal with a short nerve emitted from about its centre (this is identical in both wings, but may not be a constant character). The antennae have the intermediate joints simple, not sinuate as in *boops*, etc. It is, however, larger than one would have expected the ♂ of this species to be, viz. 10 mm. But the species of *Astatus* are very variable in this respect.

[A ♂ and 5 ♀♀ answering to this description are placed together (unnamed) in Coll. Saunders. Two ♀♀ are from Bône, the rest from Le Tarf, 24. and 26. vii, 96. A. E. E.]

5. *TACHYTES BISKRENSIS*, n. sp.

♂ ♀. *T. freygessneri*, Kohl, valde affinis, differt tamen, pedibus maxima parte rufo-testaceis; capite et thorace pilis argenteis dense vestitis; alis hyalinis; abdomine toto rufo-testaceo; ♀ segmentis abdominalibus fascia lata apicali argentea ornatis.

Very closely allied to *freygessneri*, Kohl, with which it seems to agree in nearly all structural characters except that the vertex is slightly wider in proportion: but in colour and pubescence it differs so strikingly that I am describing it as new.

♂ ♀. Head and scape of the antennae entirely clothed with shining silvery hairs. Mandibles more or less testaceous-red, clothed with silvery hairs at the base; vertex between the eyes about as wide as the second and half the first joint of the flagellum taken together. Thorax and propodeum entirely clothed with silvery hairs (these are more brilliant in the ♀ than in the ♂). The disc of the mesonotum in my only ♀ is more or less rubbed, and the surface is dull and exceedingly closely punctured; wings very clear and hyaline, tegulae and nervures very pale testaceous. Legs in the ♂ black, with all the tarsi, the entire posterior tibiae, the intermediate and anterior tibiae, posteriorly testaceous, anteriorly piceous; in the ♀ all the legs are clear testaceous and clothed with silvery hairs, the front femora anteriorly and the front and intermediate coxae black; abdomen clear testaceous. Each segment in the ♀ bears a wide apical band of silvery hairs covering nearly half of the 1st and 2nd segments, $\frac{3}{4}$ of the 3rd and the whole of the 4th and 5th; the apical dorsal valve is clothed with slightly golden hairs; in the ♂ the disposition of the hairs is very similar, but they are less vividly silvery, and the bands are narrower, the hairs of the 5th and 6th segments are golden, and the dorsal valve is silvery. Beneath shining and glabrous in the ♀, in the ♂ sparsely clothed with adpressed golden hairs.

Long. 12–13 mm.

[Biskra, 22. v, 27. A. E. E. Types ♂ and ♀ in Coll. Saunders.]

6. TACHYTES AENEA, n. sp.

♂. Aeneus argenteo-aureopilosus, tegulis tarsis que testaceis, alarum nervis piceis, thorace pilis erectis densissime vestito, propodeo linea centrali nitidâ impresso, abdomine pubescentia argentea-aurea dense vestito.

[Here is added in the margin a pencil annotation "changing in different lights."]

♂. Bronzy, densely clothed with golden-greyish hairs, tarsi testaceous, vertex between the eyes about as wide as the 2nd and 3rd joints of the flagellum together, antennae rather short, joints of the flagellum not twice as long as wide, face so densely covered with hairs that the sculpture is invisible—these hairs in certain

lights are bright silvery with a slight golden tinge. Vertex very closely and exceedingly finely punctured. Thorax very densely clothed all over with erect hairs, its sculpture hidden except on the mesopleurae, which are rugosely punctured. Wings slightly dusky, nervures piceous, tegulae pale testaceous, front metatarsus with four pale short spines along its outer edge, and two at its apex, tibiae with a few feeble spines, calcaria pale. Propodeum with a smooth shining impressed central line; punctured above and at the sides, but so densely clothed with hairs that the sculpture is mostly hidden. Abdomen clothed with adpressed sericeous pubescence, in certain (lateral) lights forming wide apical silvery-golden bands, viewed from in front and in other lights, apparently covered entirely with silvery-golden hairs, each change of position causing a difference in the apparent arrangement of lighter and darker hairs, apical valve rufescent. Segments beneath shining, black, punctured, their apices testaceous.

Long. 6-9 mm.

[Biskra, 25. iv, 97. A. E. E. Coll. Saunders.]

7. TACHYTES MACULICORNIS, n. sp.

Nigra argenteo-pubescent, mandibulis piceis, palpis alarumque nervis laete testaceis, tegulis pallidis, valvula anali pilis argenteis tecta. Maris antennae articulis 4-6 dilatatis et pallidis, 7-8 pallido-notatis: metatarsi intermedii apice valde spinoso producti.

♂ ♀. Black clothed with silvery pubescence; mandibles dark piceous; palpi tarsi and wing-nervures bright testaceous; tegulae pale. Antennae in the ♂ with joints 3 to 8 of the flagellum beneath each with a conspicuous pale ochreous spot (that of the 8th only occupying its extreme base). Apical dorsal valve in both sexes clothed with silvery hairs.

This species agrees closely with *freygessneri* in the proportions of the vertex and antennae, and in the ♀ is hardly to be distinguished from the latter except by its very different coloration and more abundant silvery pubescence. The ♂ however presents most unusual characters. Its antennae have joints 4, 5, 6 of the flagellum dilated—the dilatation being widest at the base of each joint, which therefore projects beyond the apex of the preceding one. These three dilated joints are almost entirely pale ochreous beneath, their apices only being narrowly black. The third joint, though not dilated, is a trifle thickened and pale beneath. Joints 7 and 8 are normal except for their

pale spots. Another striking character is the form of the intermediate metatarsus. This is slightly bent and produced at the apex anteriorly into a spine-like process which bears at its extremity a short white spine. The posterior metatarsi also are slightly bent at the base. In disposition of pubescence this ♂ closely resembles its ♀.

[Biskra. Several ♂♂ and ♀♀. A. E. E. and F. D. M.]

8. TACHYSPHEX PHILIPPI, n. sp.

♀ *T. nitido* affinis : puncturatione minutiore, tibiis anticis antice pallidis tegulis que testaceis distinctus.

♀ Black, clothed with a very short, inconspicuous grey pubescence; front tibiae on their inner side, and the apical joints of all the tarsi, testaceous; mandibles piceous-red near the base, tegulae testaceous. Head and thorax slightly shining; the former (with the face) closely punctured on a finely rugulose surface; the latter finely and rather closely punctured on an almost smooth surface. Vertex between the eyes about equal to the 1st and 2nd joints of the flagellum together; wings slightly dusky; mesopleurae punctured on a slightly and very finely rugulose surface; propodeum rather unusually finely rugose, its area indefinite, its posterior declivity transversely strigose, and its sides diagonally so. Comb of anterior metatarsus composed of thin testaceous bristles, abdomen dull, exceedingly finely and microscopically rugulose, without evident puncturation. Segments 1, 2 and 3 with a lateral apical band of silvery pubescence [visible] only in certain positions. Apical dorsal valve elongate (as in *pectinipes*, etc.) and irregularly punctured.

Long. 8 mm.

Easily separated from *nitidus*, etc., by its fine puncturation, (inwardly) pale front tibiae, and testaceous tegulae, combined with the elongate form of the dorsal valve (this last character distinguishing it at once from the black form of *lativalvis*). The specimen bears a ticket in F. F. Kohl's handwriting "sp. ? a *T. nitido* diversa."

[1 ♀ Philippeville, 21. vi, 98. F. D. M. Type in Coll. F. D. Morice.]

9. TACHYSPHEX PIAGETIODES, n. sp.

[Mr. Saunders appears to have described this species in English only, leaving a blank space for a Latin diagnosis to be added afterwards.]

♀ Black, shining, in form something like a *Crabro* of the *Coelocrabro* group, mandibles towards the apex, tegulae and wing veins, apices of the femora, and the tibiae (except a dark stain on their inner side) testaceous. Head punctured. Width of vertex between the eyes equal to the combined length of the first four joints of the flagellum; orbits parallel sided; the face on each side more or less clothed with silvery hairs; clypeus finely punctured, its centre produced into a short angular process which is carinated on the centre, and slightly raised on its margins. Antennae with the third joint of the flagellum considerably longer than the second and slightly longer than the fourth. Mesonotum (including the scutellum) shiny, clearly and rather remotely punctured, clothed with inconspicuous greyish hairs. Wings hyaline, their nervures pale testaceous, radial cell truncate at the apex, third submarginal shortly ligulate. Mesopleurae transversely rugose, and sparingly clothed with silvery hairs; propodeum without a definite dorsal area, transversely rugose, its posterior declivity with a well-marked central fovea, the sides diagonally strigose and clothed with silvery hairs. Legs with the tibiae spinose, front metatarsi with a comb of six moderately long pale spines; abdomen shining, with scarcely perceptible sculpture, the apices of the segments narrowly discoloured (the discoloration widening along the sides of the segments); basal segment about as long as wide; dorsal area of apical segment very largely punctured, its margins raised and testaceous. Beneath shining.

Long. [about 7 mm.].

This insect was submitted by Mr. Morice to Herr F. F. Kohl some years ago, and bears a label in the latter's handwriting. "*Tachysphex* n. sp. *transiens ad Parapiagetia*, Kohl." Had it not been for this I should scarcely have dared to place it in this genus.

[Biskra. F. D. M. Type in Coll. F. D. Morice.]

10. *TACHYSPHEX EATONI*, n. sp.

♀ Niger. Pro-meso- et metanota nitidissima, remotissime punctata; mesopleurae opacae, minute et crebre punctatae; alae hyalinae; abdomen nitidum sed non politum, segmentis basalibus minute punctatis, valvula dorsali elongata.

♀ Black; mandibles reddish except at the base; tegulae piceous. Vertex of head shining, finely and remotely punctured; face more or less dull, punctured closely and more deeply [than the vertex?]; clypeus narrowly impressed at the apex, and widely truncate;

vertex between the eyes scarcely so wide as the second and third flagellar joints taken together ; pro-meso- and metanota very shining and polished, with only a few very scattered punctures ; mesopleurae dull, exceedingly closely and finely punctured ; wings nearly hyaline ; propodeum above dull, finely and longitudinally rugulose, clothed with very short and inconspicuous greyish hairs, its sides diagonally striate ; anterior tarsi with a comb of slender and not very long brownish hairs. Abdomen shining, but not polished like the thorax ; finely punctured on the basal segments, those towards the apex being almost impunctate ; apical dorsal valve polished and elongate, its shape much as that of *pectinipes*.

Long. 7 mm.

The polished, almost impunctate, mesonotum, etc., of this species will distinguish it at a glance.

[Biskra, 5. iv, 97. A. E. E. Type in Coll. Saunders.]

11. TACHYPHEX CAPITALIS, n. sp.

Species insignis ; niger, mandibulis, tegulis, abdomine pedibusque testaceis. Caput maximum, vertice latissimo, articulis 1, 2, 3, 4 antennarum flagelli simul sumptis aequali ; pronotum oblique-strigosum ; propodeum transverse-striatum ; abdomen impunctatum, valvulâ dorsali latâ punctis remotis impressâ.

♀ Head and thorax black, clothed with silvery white hairs. Mandibles, tegulae, wing-veins, legs, and abdomen testaceous, wings with a yellowish tinge. Head unusually produced posteriorly (from a sideways view the cheeks behind the eyes are as wide as the eyes themselves) ; vertex between the eyes exceedingly wide and convex (as wide or even wider than the first four joints of the flagellum). This great width gives the face a most unusual appearance for that of a species of this genus. Clypeus flat, its apex slightly elevated, shining and bituberculate. Antennae with the second joint of the flagellum nearly once and a half as long as the third. Pronotum diagonally strigose ; mesonotum and mesopleurae thickly clothed with silvery hairs ; propodeum clothed with long silvery hairs, transversely rugose above, diagonally so at the sides. Legs rather thick ; front metatarsi with seven rather stout pale spines. Abdomen almost smooth, and without evident puncturation. The sides of the second and following segments are clothed with silvery pubescence, visible only in certain lights, meeting almost in the centre of the segment ; apical dorsal valve widely triangular, and with large scattered punctures.

Long. 13 mm.

♀ 1. Biskra, 11. vi, 98. F. D. M.

[Type in Coll. F. D. Morice.]

12. TACHYSPHEX [GRACILITARSIS], n. sp.*

[* In the original MS. a blank space is left for a specific name to be afterwards inserted. The name offered above is founded on the character by which the author distinguishes his species from *panzeri*, var. *oraniensis*.]

♀. *T. panzeri* var. *oraniensi* simillima. Tarsis posticis gracilioribus horum articulo quarto vix usque ad medium exciso.

♀. Very closely allied to large specimens of *T. panzeri* var. *oraniensis*, and in colour, hairing and general appearance hard to separate from the latter. The following structural character will, however, easily distinguish it. The fourth joint of the posterior tarsi is divided in the middle not quite to its centre, and its longer apical spine (regarded laterally) does not extend to the apex of the fifth joint. (In *panzeri* the fourth joint is divided up *far beyond the middle, almost to the base*; and the longer apical spine, regarded laterally, extends quite to the apex of the fifth joint.) In fact the tarsi are altogether thinner and less strongly spined than they are in *panzeri*, and the claws are less developed. Another good character, though not quite so easy to appreciate, lies in the form of the dorsal area of the sixth segment. In this species it is distinctly shorter and wider than in *panzeri*, and more polished.

Long. [about 13 mm.].

Biskra, F. D. M.

[4 ♀♀, one of which must have been the "type," are in Coll. F. D. Morice.]

13. TACHYSPHEX [EDUARDI, n. sp.].

[In describing this species the author has again left a blank for the subsequent insertion of a specific name: and to fill this void the name *eduardi* is now suggested.]

Panzeri et *pygidiali* affinis, sed alis anterioribus fuscis sat distinctus; alae posteriores multo dilutiores. Tarsi antici (♂) spinis brevibus (♀) spinis longis curvatis nigris armati.

♂. Allied to *panzeri* and *pygidialis* in the finely rugulose sides of the propodeum, but at once distinguished by the dark anterior wings. Head and thorax black; face clothed with golden pubescence between the ocelli and the antennae, with silvery on the sides of the face below them and on the clypeus. Clypeus very convex longitudinally, its anterior portion shining, strongly punctured, rounded in front. Width of vertex between the eyes scarcely equal to the length of the first and second joints of the flagellum taken together. Mandibles

reddish in the middle. The antennae appear to be rather thicker and longer than in *pygidialis*. Mesonotum finely and very closely punctured, clothed with pale decumbent scarcely conspicuous pubescence which gives it in certain lights a greyish appearance. Anterior wings strongly tinged with smoky brown, posterior pair much clearer; tegulae testaceous. Propodeum very finely rugulose both above and at the sides, clothed with a fine and very short grey pubescence. Legs black with the exception of the tarsi which are more or less piceous; front tarsi without any regular comb; the spines of the metatarsi not longer than the middle of the joint itself. Abdomen dull, exceedingly finely punctured; the first three segments red, the rest black.

♀ (?). A single ♀ from Bône agreeing in sculpture, colour of wings, etc., with the above, is closely allied to *pygidialis*, but has a slightly narrower dorsal valve; its front tarsi have a comb of long dark curved spines, and the sides of the propodeum have distinct striae amongst the rugulosity.

Long. 11 mm.

Had this female occurred at Biskra with the males I should have had no doubt of its being the other sex of the same species; but coming as it does from Bône, a much more northern locality, I feel it is wise to suggest the possibility of its being distinct.

[Types in Coll. Saunders.]

14. PROSOPIGASTRA INSIGNIS [n. sp.].

♀. Species insignis et omnium generis huius maxima. Caput nigrum vertice crebre punctato, tuberculo faciali magno (nitidissimo et punctato), mandibulis, clypeique apice testaceis. Thorax niger, opacus, crebre punctatus (disco nitido, remote-punctato, excepto). Abdomen testaceum, segmentis 1-4 crebre, 5 parce punctatis, valvula dorsali nitida, remote sed fortiter punctata, apice ipso truncato. Subtus, segmento secundo crebre, reliquis remote punctatis.

♀. Head and thorax black; mandibles, apex of clypeus, tegulae and veins of the wings, legs, and abdomen testaceous. Head dull, closely punctured on the vertex; face below the ocelli clothed with silvery hairs, facial tubercle large, polished, punctured; clypeus produced anteriorly into a semicircular testaceous plate, which is somewhat elevated along its edge; cheeks posteriorly and the front of the mesonotum clothed with silvery hairs. Mesonotum dull, strongly and closely punctured except just on the disc, where, as well as on the scutellum, it is shining and remotely punctured. Mesopleurae

densely clothed with silvery hairs; wings with a yellow tinge; anterior tarsi with a comb of long black bristle-like hairs. Metanotum densely clothed with greyish hairs; propodeum (dorsally) finely reticulate; its sides diagonally strigose and clothed with silvery hairs. Abdomen densely and strongly punctured on the first four segments, sparsely on the fifth; apical dorsal valve narrowly truncate, shining, largely and remotely punctured; the segments slightly discoloured at their apices, and with a row of fine golden ciliae. Beneath shining; second segment closely punctured, the rest remotely so.

Long. 10 mm.

♀ 1. Biskra (11. vi, 98. F. D. M.).

[Type in Coll. F. D. Morice.]

This fine species is nearly double the size of any of the other Palaearctic species. It somewhat resembles an exceedingly large *punctatissima*, but the puncturation of the mesonotum is finer, and only large and remote just on the disc, whereas in *punctatissima* the large punctures extend over nearly the whole surface. The silvery sides of the thorax and propodeum and the grey-haired post-scutellum are also characters of the new species, as well as the wholly testaceous abdomen.

15. GASTROSERICUS MORICEI, n. sp.

♂. Caput atque thorax nigra pilis sericeis aureo-argenteis densissime vestita. Antennarum scapus, tegulae, tuberculi [humerales], abdomen et pedes testacei; abdominis segmenta plus minus pilis argenteis tecta, apicibus fere pellucidis et argenteo-fasciatis; antennae articulis 4-7 subtus sinuatis, articulo apicali subtus excavato leniterque curvato.

♂. Black, with mandibles, scape of antennae, tubercles, tegulae, and wing veins, legs and abdomen testaceous. Head and thorax, including the propodeum, densely clothed with silvery hairs, which in some lights have a more or less golden tint; antennae with the 4th, 5th, 6th and 7th joints more or less sinuate, the apical joint flattened, somewhat excavated beneath and slightly curved. The silvery clothing of the thorax is very dense, and is divided down the centre by a sort of "parting." Wings hyaline, anterior pair with the radial cell very short and sharply truncate at the apex. Second submarginal triangular, its base about as long as the radial. Front metatarsi probably with a comb of fine transparent spine-like hairs, but of these I can only see two on the only remaining front metatarsus in the present specimen. Propodeum with its pubescence divided down

the centre by a distinct parting; its sculpture hidden, as is that of the thorax; abdomen pale testaceous. The apices of the segments almost colourless and subdiaphanous. All the segments are more or less clothed with silvery adpressed pubescence, and there is a band of similar pubescence at the apex of each; according to the position the insect is held in, these silvery patches of pubescence form different patterns; beneath with the 2nd, 3rd and 4th segments densely clothed with silvery hairs.

Long. [about 5 or 6 mm.].

[Biskra, 7. vi, 98. F. D. M. Type in Coll. F. D. Morice.]

16. *DINETUS SIMPLICIPES*, n. sp.

♂. *D. picto* simillimus, minus flavopictus, differt ab eo metatarsis anticis armatis 6 spinulis solum longitudine inaequalibus (harum quatuor plus minus dilatatis) femoribus anticis minus dilatatis metatarsis intermediis gracilioribus et minus curvatis.

♀ latet.

♂. Closely allied in general aspect to *pictus*, F., but with the abdomen (at any rate in the specimens before me) entirely rufo-testaceous, showing in one specimen only any signs of flavous markings, and having the apex concolorous (not black as in *pictus*). The most important character, however, by which it may be known from the above-mentioned species is the form and number of the spines on the front metatarsi. These are inconspicuous, only six in number, fine, irregular in size and length, and four only of them more or less dilated, whereas in *pictus* they are seven in number, all thick and flat, and form a very regular and conspicuous comb. The front femora are less dilated, and the intermediate metatarsi are less curved and more slender than in *pictus*. The propodeal area is much more finely rugulose, and its sides more finely and densely strigose. The first segment of the abdomen also, though finely rugulose, lacks the distinct puncturation which exists on that segment in *pictus*.

Long. 6-6½ mm.

Unfortunately Mr. Eaton met with males only of this species.

[Five ♂♂ in Coll. Saund. from Bône and Le Tarf (vi. '96).]

17. *DINETUS DENTIPES*, n. sp.

♂ ♀. *D. picto* minor et gracilior, pilis argenteis micantibus vestitus; ♂ trochanteribus anticis dente angulari instructis; his in ♀ subelongatis et parum curvatis; femoribus anticis in ♀ subtus ciliatis.

♂. Smaller and paler than *pictus*, and more or less clothed with fine silvery hairs. Face and antennae pale testaceous, clothed with brilliant silvery pubescence; vertex black, cheeks behind the eyes testaceous, clothed with rather long silvery hairs. Prothorax pale testaceous, clothed with silvery hairs, with a black band across the central depression of its notum; mesonotum black, clothed with silvery hairs and punctured, its anterior angles pale; scutellum, and a spot on each side of it, polished, shining, and very largely and remotely punctured; mesopleurae black above, beneath (as well as the sterna) shining and very remotely punctured. Wings hyaline, their nervures pale testaceous, metanotum black, postscutellum pale and shining; propodeum finely rugulose, black, its "area" (the sides of which are testaceous) finely rugulose; the sides beyond the area are clothed with brilliant silvery hairs. Legs pale testaceous with the front trochanters produced into a large angular tooth. Front metatarsi with four very fine, nearly white spines. Abdomen testaceous, very finely rugulose, first, second and third segment each with a broad pale sub-apical band, the actual apex submembranous and colourless, clothed with silvery hairs. Beneath shining.

♀. Very like the ♂, but with the dark colour more extensive. The front trochanters are not dentate, but unusually elongate and slightly curved; the front femora with a row of long white hairs on their underside; the metatarsi with a comb of seven fine whitish spines, of these the two nearest the base are simple, the others more or less flattened; three spring from the apex of the joint. Abdomen with the pale bands less in evidence than in the ♂, but the silvery apical bands are more pronounced. Pygidial area shining.

Long. 5-5½ mm.

A very distinct species recognisable at once by the silvery pubescence, and the peculiar structure of the front trochanters.

[Types of ♂ and ♀ are in Coll. Saunders, taken near Biskra by Mr. Eaton in April.]